

PUBLICATION NUMBER : 61133911  
PUBLICATION DATE : 21-06-86

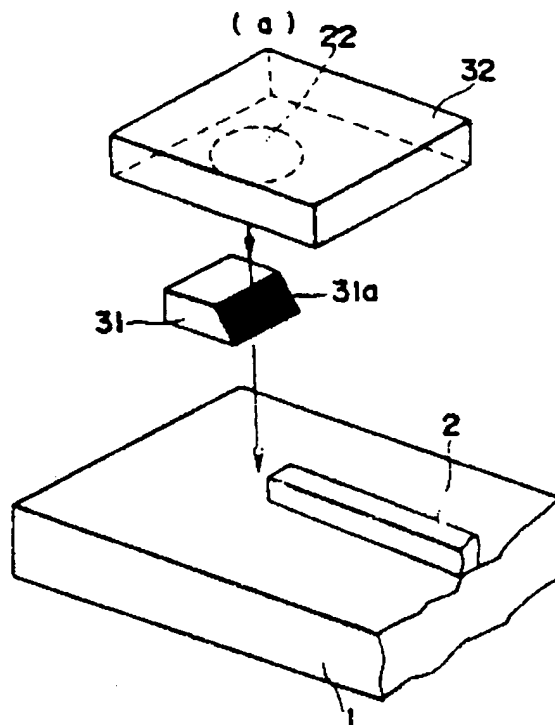
APPLICATION DATE : 03-12-84  
APPLICATION NUMBER : 59255371

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INT.CL. : G02B 6/42 // G02B 6/12

TITLE : COUPLING METHOD OF LIGHT  
EMITTING ELEMENT AND  
PHOTODETECTOR AS WELL AS  
OPTICAL WAVEGUIDE



ABSTRACT : PURPOSE: To make possible efficient optical coupling by installing a microreflecting mirror having a reflecting surface of approximately  $45^\circ$  with a base plate surface of a base plate near the end of an optical waveguide.

CONSTITUTION: The microreflecting mirror 31 is installed on the base plate 1 at the end of the optical waveguide 2 and the reflection face 31a thereof has approximately  $45^\circ$  angle with the surface of the plate 1. A light emitting element or photodetector 32 is disposed on the mirror 31, by which the waveguide 2 and the element 32 is coupled. The case of disposing, for example, a photodiode as the element 32 is assumed here. Signal light is then changed in direction at approximately  $90^\circ$  by the face 31a and is efficiently made incident on the photodetecting face 22 of the photodiode by which the signal light is converted to an electric signal. The coupling of the light emitting element or photodetector and the optical waveguide is thus made possible and the considerable increase in the degree of freedom in designing of an optical circuit is made possible.

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